Pavement Design Package Submittal Checklist (In-House)

PI Number: _____

County: _____

Management Let Date: _____

GDOT Project Manager: _____

Design Phase Leader: _____

Construction Duration (months): _____

Package Submittal Date: _____

DPL email ProjectWise link of the submittal to COG and mail in a hardcopy of the submittal. Pavement Design Package shall be one combined PDF, in the order listed below, and submitted in accordance with the ProjectWise Pavement Design Submission and Approval Process. If the PDF is secured it shall have signature fields pre-applied for all required signatures, allow printing, commenting, filling in form fields, and signing existing signature fields. Screen shots of PDF security settings located here. For further information on signing documents in ProjectWise see the Process for Digitally Signing Documents in Bluebeam Revu

1) Quality Assurance (QA)
- ☐ COG Pavement QA Review and DPL Responses

2) Project Description
- ☐ A Detailed Pavement Project Description (see attached Appendix A for an example)

3) Design Analysis
- ____ (#) Full Depth Rigid Pavement Designs
- ____ (#) Full Depth Flexible Pavement Designs
- ____ (#) Temporary Pavement Designs

Inlay/Overlay Designs are approved in a PES and should not be included

4) Traffic **(include approval letter if done by consultant)**
- ☐ Build Traffic Diagrams **(AADT Build Only, No DHV)**
- ☐ Existing Traffic Diagrams for temporary pavements
- ☐ Traffic Assignment Letter – For Bridge Projects if no traffic diagrams are available
- ☐ Roundabout Traffic Tool for Pavement Design Output – **For all Roundabouts**

5) Plan Sheets (11” x 17”)
- ☐ Cover
- ☐ Typical Sections
- ☐ Staging Typical Sections for temporary pavements
- ☐ Construction Sheets Section 13

6) Reports and Summaries
- ☐ Current Preconstruction Status Report
- ☐ Soil Survey Summary Report **(include approval letter if done by consultant)**
- ☐ GDOT's VE Study Implementation Correspondence

Note: A Pavement Design Package submittal is considered for QA review by GDOT Office of Roadway Design after QC review is performed by the Design Phase Leader on the submittal. Missing items, inaccurate, or incomplete submission of Pavement Design Package could result in rejection of the submittal.

Pavement Design Package Submittal Checklist (Consultant)

PI Number: _____

County: _____

Management Let Date: _____

GDOT Project Manager: _____

Design Phase Leader: _____

Construction Duration (months): _____

Package Submittal Date: _____

Pavement Design Package shall be one combined PDF, with bookmarks for each item, in the order listed below, and submitted in accordance with the ProjectWise Pavement Design Submission and Approval Process. If the PDF is secured it shall have signature fields pre-applied for all required signatures, allow printing, commenting, filling in form fields, and signing existing signature fields. Screen shots of PDF security settings located here. For further information on signing documents in ProjectWise see the Process for Digitally Signing Documents in Bluebeam Revu

1) Quality Assurance (QA)
- ☐ Letter signed by DPL detailing the QA that has been performed in this package

2) Project Description
- ☐ A Detailed Pavement Project Description (see attached Appendix A for an example)

3) Design Analyses
- ____ (#) Full Depth Rigid Pavement Designs
- ____ (#) Full Depth Flexible Pavement Designs
- ____ (#) Temporary Pavement Designs

Inlay/Overlay Designs are approved in a PES and should not be included

4) Traffic **(include approval letter if done by consultant)**
- ☐ Build Traffic Diagrams **(AADT Build Only, No DHV)**
- ☐ Existing Traffic Diagrams for temporary pavements
- ☐ Traffic Assignment Letter – For Bridge Projects if no traffic diagrams are available
- ☐ Roundabout Traffic Tool for Pavement Design Output – **For all Roundabouts**

5) Plan Sheets (Full Size, Half Size, or 11" X 17" PDF)
- ☐ Cover
- ☐ Typical Sections
- ☐ Staging Typical Sections for temporary pavements
- ☐ Construction Sheets Section 13

6) Reports and Summaries
- ☐ Current Preconstruction Status Report
- ☐ Soil Survey Summary Report **(include approval letter if done by consultant)**
- ☐ GDOT's VE Study Implementation Correspondence

Note: Missing items, inaccurate, or incomplete submission of Pavement Design Package could result in rejection of the submittal.

Appendix A) Example

Pavement Project Description for PI NO. 322470, Twiggs County

Description:

The project is a widening project for SR 96 from just West of SR 87 to just South of I-16 interchange for 7.73 miles. Projects widens SR 96 from 2 to 4 lanes. Project begins at STA 668+00 and ends at STA 1076+00.

The typical section calls for four lane rural section with a 44 foot depressed media with 6ft inside shoulder (2ft paved) and 10ft outside shoulder (6.5ft paved).

Factors:

- Soil Survey Summary report approved on 9/7/16, recommends GAB as only base to be used, SSV of 2.5, RF of 1.5, k value of 130pci. *Or* Soil Survey Summary not required per PDP Section 6.3.2 and list historic values used.
- The let date of 2018, with 2 years construction duration puts open year at 2020. Therefore pavement design AADT analysis is for 2020/2040.
- Also +2 years ADT designs (2022/2042) are submitted for approval to account for any future scheduling changes.

Designs:

Full Depth Flexible Design A: Full Depth Flexible pavement for SR 96 mainline widened areas from STA 668+00 to STA 1076+00.
- (2020/2040) Initial AADT 3,050 and Final AADT 4,650, 4.46% underdesigned
- 24 hr Truck 10.75%, 4.75% SU, 6.0% MU

State Route Prioritization Category: *Critical/High/Medium/Low/Off-System*

1.5” 12.5mm Superpave, GP2
2” 19mm Superpave, GP1 or 2
6” 25mm Superpave, GP1 or 2
12” GAB

Full Depth Flexible Design A +2: +2 years Full Depth Flexible pavement for SR 96 mainline widened areas from STA 668+00 to STA 1076+00.
- (2022/2042) Initial AADT 3,190 and Final AADT 4,880, 4.46% underdesigned
- 24 hr Truck 10.75%, 4.75% SU, 6.0% MU
- Has same full-depth pavement structure as Full Depth Design A

Full Depth Rigid Design B: Full Depth Rigid pavement for SR 96 mainline widened areas from STA 668+00 to STA 1076+00.
- (2020/2040) Initial AADT 3,050 and Final AADT 4,650, balance thickness: 8.45 inches
- 24 hr Truck 10.75%, 4.75% SU, 6.0% MU

State Route Prioritization Category: *Critical/High/Medium/Low/Off-System*

9” JPCP
0” 19mm Superpave, GP1 or 2
8” GAB

Full Depth Rigid Design B +2: +2 years Full Depth Rigid pavement for SR 96 mainline widened areas from STA 668+00 to STA 1076+00.
- (2022/2042) Initial AADT 3,190 and Final AADT 4,880, balance thickness: 8.68 inches
- 24 hr Truck 10.75%, 4.75% SU, 6.0% MU
- Has same full-depth pavement structure as Full Depth Design B

Appendix A) Example Continues

Roundabout Rigid Design C: Full Depth Rigid pavement for SR 96 mainline widened areas from STA 668+00 to STA 1076+00.
- (2020/2040) Initial AADT 4,050 and Final AADT 5,650, balance thickness: 8.62 inches
- 24 hr Truck 10.75%, 4.75% SU, 6.0% MU

State Route Prioritization Category: *Critical/High/Medium/Low/Off-System*

9" JPCP
0" 19mm Superpave, GP1 or 2
8" GAB

Roundabout Rigid Design C +2: +2 years Full Depth Rigid pavement for SR 96 mainline widened areas from STA 668+00 to STA 1076+00.
- (2022/2042) Initial AADT 4,200 and Final AADT 5,700, balance thickness: 8.73 inches
- 24 hr Truck 10.75%, 4.75% SU, 6.0% MU
- Has same full-depth pavement structure as Roundabout Design C

Roundabout Flexible Design D: Full Depth Flexible pavement for SR 96 mainline widened areas from STA 668+00 to STA 1076+00.
- (2020/2040) Initial AADT 4,050 and Final AADT 5,650, 4.46% underdesigned
- 24 hr Truck 10.75%, 4.75% SU, 6.0% MU

State Route Prioritization Category: *Critical/High/Medium/Low/Off-System*

1.5" 12.5mm Superpave polymer-modified, GP2
2" 19mm Superpave, GP1 or 2
7" 25mm Superpave, GP1 or 2
12" GAB

Roundabout Flexible Design D +2: +2 years Full Depth Flexible pavement for SR 96 mainline widened areas from STA 668+00 to STA 1076+00.
- (2022/2042) Initial AADT 4,200 and Final AADT 5,700, 4.46% underdesigned
- 24 hr Truck 10.75%, 4.75% SU, 6.0% MU
- Has same full-depth pavement structure as Full Depth Design D

Side Roads Full Depth Design: Full Depth Flexible to be use for all side roads
There are 6 side roads in this project that were close in ADT and 24 hr truck% volumes. Therefore, the most conservative of 6 side roads which was CR 102/Walters RD. used for side roads pavement designs.
- (2020/2040) Initial AADT 1,050 and Final AADT 1,350, 7.22% underdesigned
- 24 hr Truck 6.75%, 4.75% SU, 2.0% MU

State Route Prioritization Category: *Critical/High/Medium/Low/Off-System*

1.5" 12.5mm Superpave, GP2
2" 19mm Superpave, GP1 or 2
8" GAB

Side Roads Full Depth Design +2yr: +2 years Full Depth Flexible to be use for all side roads using CR 102/Walters RD.
- (2022/2042) Initial AADT 1,090 and Final AADT 1,410, 7.38% underdesigned
- 24 hr Truck 6.75%, 4.75% SU, 2.0% MU
- Has same pavement structure as Side Roads Full Depth Design A

Appendix A) Example Continues

Temporary Design: Temporary Full Depth Flexible pavement for SR 96 mainline transition areas from STA 213+00 to STA 255+00 and from STA 814+00 to STA 866+00
- (2018/2020) projected ADT with two year duration. (Note: 2018 is the let date year with 2020 to be 2 years construction duration)
- (2018/2020) Initial AADT 3,050 and Final AADT 3,210, 13.12% underdesigned
- 24 hr Truck 10.75%, 4.75% SU, 6.0% MU

1.5" 12.5mm Superpave, GP2
2" 19mm Superpave, GP1 or 2
6" GAB

Temporary Design +2: Temporary Full Depth Flexible pavement for SR 96 mainline transition areas from STA 213+00 to STA 255+00 and from STA 814+00 to STA 866+00
- (2020/2022) projected ADT with 2-year duration.
- (2020/2022) Initial AADT 3,100 and Final AADT 3,300, 13.20% underdesigned
- 24 hr Truck 10.75%, 4.75% SU, 6.0% MU
- Has same full-depth pavement structure as Temporary Design

Include the appropriate signature information below at the end of your Pavement Project Descriptions

Signatures are only required in the pavement project description section and are no longer required on the designs themselves. All signatures should be Digital Signatures that include a time/date. To ensure all Digital Signatures remain valid, all signature fields should be added to the package before the PDF package is merged/created and before the first signature is applied.

Designer (Prepare): _____

Design Phase Leader (QC): _____

State Roadway Design Engineer (QA): _____
(Only include with In-House, Consultants provide QA letter in package instead)

State Pavement Engineer (Approve): _____